

Sub B17 ~~21. A plant, comprising:~~

~~(a) plant cells containing nucleotide sequences encoding one or more biologically functional multimeric proteins not normally produced by the plant; and~~

~~(b) biologically functional multimeric proteins encoded by said nucleotide sequences.~~

~~22. The plant of claim 21 wherein the multimeric protein comprises a heteromultimeric protein.~~

~~23. The plant of claim 21 wherein the multimeric protein comprises a homomultimeric protein.~~

~~24. The plant of claim 21 wherein the multimeric protein comprises a ligand binding polypeptide.~~

~~25. The plant of claim 24 wherein the ligand is an antigen.~~

~~26. The plant of claim 21 wherein the multimeric protein forms a binding site specific for a predetermined antigen.~~

~~27. The plant of claim 21 wherein the multimeric protein is an enzyme.~~

~~28. The plant of claim 21 wherein the multimeric protein is an abzyme.~~

~~29. The plant of claim 21 wherein the multimeric protein contains one or more disulfide bonds.~~

Sub B27 ~~30. The plant of claim 21 wherein the multimeric protein is joined by hydrogen bonding.~~

~~31. The plant of claim 21 wherein the multimeric protein comprises an immunoglobulin product.~~

~~32. The plant of claim 31 wherein the immunoglobulin product comprises an Fab.~~

~~33. The plant of claim 31 wherein the immunoglobulin product comprises an Fab'.~~

34. The plant of claim 31 wherein the immunoglobulin product comprises an F(ab')₂.

35. The plant of claim 31 wherein the immunoglobulin product comprises an Fv.

36. The plant of claim 31 wherein the immunoglobulin product comprises an antibody.

37. The plant of claim 31 wherein the immunoglobulin product contains a paratope.

38. The plant of claim 21 wherein the multimeric protein comprises a glycosylated immunoglobulin molecule free of sialic acid residues.

39. The plant of claim 21 wherein the plant is a dicotyledonous plant.

40. The plant of claim 21 wherein the plant is a monocotyledonous plant.

41. The plant of claim 21 wherein the plant is an alga.

42. The plant of claim 21 wherein the multimeric protein includes a J chain.

43. A plant cell that contains a nucleotide sequence that encodes a biologically functional multimeric protein not normally produced by the plant cell.

44. The plant cell of claim 43 wherein the multimeric protein comprises a heteromultimeric protein.

45. The plant cell of claim 43 wherein the multimeric protein comprises a homomultimeric protein.

46. The plant cell of claim 43 wherein the multimeric protein comprises a ligand binding polypeptide.

47. The plant cell of claim 46 wherein the ligand is an antigen.

48. The plant cell of claim 43 wherein the multimeric protein forms a binding site specific for a predetermined antigen.

49. The plant cell of claim 43 wherein the multimeric protein is an enzyme.

50. The plant cell of claim 43 wherein the multimeric protein is an abzyme.

51. The plant cell of claim 43 wherein the multimeric protein contains one or more disulfide bonds.

Sub B37 52. The plant cell of claim 43 wherein the multimeric protein is joined by hydrogen bonding.

AI 53. The plant cell of claim 43 wherein the multimeric protein comprises an immunoglobulin product.

54. The plant cell of claim 53 wherein the immunoglobulin product comprises an Fab.

55. The plant cell of claim 53 wherein the immunoglobulin product comprises an Fab'.

Sub 56. The plant cell of claim 53 wherein the immunoglobulin product comprises an F(ab')₂.

57. The plant cell of claim 53 wherein the immunoglobulin product comprises an Fv.

58. The plant cell of claim 53 wherein the immunoglobulin product comprises an antibody.

59. The plant cell of claim 53 wherein the immunoglobulin product contains a paratope.

60. The plant cell of claim 43 wherein the multimeric protein comprises a glycosylated immunoglobulin molecule free of sialic acid residues.

Sub B47 61. The plant cell of claim 43 derived from a dicotyledonous plant.

62. The plant cell of claim 43 derived from a monocotyledonous plant.